Appl. No.: 10/608,904

Notice of Allowance date: February 13, 2006 Atty. Docket No.: 101896-108

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph starting at page 7, line 17 with the following amended paragraph:

While the snap ring 234 can have a variety of configurations, the snap ring 234 should be adapted to fit within a corresponding groove 236 formed around an inner surface of the receiver member 218. The groove 236 maintains the snap ring 234 at a particular location with respect to the spherical head 216 of the bone screw such that the snap ring 234 is expanded around the head 216. More particularly, the groove 236 should be formed in a proximal portion of the spherical seat 219 formed in the distal end 218b of the receiver member 218. Not only is the groove 236 effective to maintain the position of the snap ring 234 around the spherical head 216, but it is also effective to fully seat the snap ring 234 when the head 216 is locked within the receiver 218. As previously discussed, when a rod is seated within the receiver member 218, the compression cap 224 is forced distally to lock the bone screw 216 with respect to the receiver 218. The groove 236 receivers receives the snap ring 234 to prevent the snap ring 234 from interfering with the locking function of the compression cap 224. Accordingly, the groove 236 preferably has a depth d_l that is at least equal to, and more preferably is greater than, a thickness t_r of the snap ring 234. Alternatively, or in addition, the snap ring 234 can be adapted to expand or contract to be completely disposed within the groove 236. By way of non-limiting example, the snap ring 234 can be formed from a compressible or deformable material that allows the snap ring 234 to be forced completely into the groove 236.

Please replace the paragraph starting at page 8, line 4 with the following amended paragraph:

Still referring to FIG. 2A, the bone screw assembly 210 can be assembled by first placing the snap ring 234 within the groove 236 in the receiver member 218. The threaded shank 214 of the screw 212 can then be inserted through the axial opening 237 formed in the distal end 218b of the receiver member 218. As a result, the spherical head 216 will rest on top of the snap ring 234. The compression cap 224 can then be placed in the receiver 218 and can be used to push the head 216 into the recess 219, thereby causing the snap ring 234 to expand around the head 216 to engage the head 216. This can be achieved by using a tool to push the compression cap 224 in a distal direction. To prevent the compression cap 224 from popping out of the receiver 218, another tool can be inserted into each of the opposed bores 228a, 228b to deform the deformable material 232a, 232b, which extends across the inner surface of the receiver member 218, into the corresponding detents 230a, 230b formed in the compression cap 224. As a result, the

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compression cap 224 is prevented from moving in a proximal direction, thereby preventing the spherical head 216 from moving proximally and becoming disengaged with the snap ring 234. One skilled in the art will appreciate that a variety of other techniques and fastening members are known for use in retaining the spherical head 216 (and any rod) within the receiver 218.

Please replace the paragraph starting at page 10, line 26 with the following amended paragraph:

FIGS. 5A-5B illustrate yet another embodiment of a polyaxial bone screw assembly 510. In this embodiment, the compression cap 524 includes an axial slot 534 formed therein to allow the compression cap 524 to be contracted to engage the spherical head 516 of the bone screw 512. While the slot 534 can be formed anywhere in the compression cap 524, the slot 534 is preferably formed in the portion of the sidewall that extends between the opposed detents 530a, 530b, and more preferably the slot 534 is equidistant from each detent 530a, 530b to allow the compression cap 524 to be swaged evenly in a distal direction. FIG. 5B illustrates the compression cap 524 in the contracted state around the head 516 of the bone screw. The deformable material 532a, 532b in the receiver member 518 is deformed into the detents 530a, 530b in the compression cap 524 to contract the compression cap 524 around the spherical head 516. As a result, the frictional forces created by the compression cap 524 radially contracting around the spherical head 516 are effective to allow the bone screw 512 to be maintained at a desired angular orientation with respect to the receiver head member 518.

Please replace the paragraph starting at page 11, line 9 with the following amended paragraph:

A person skilled in the art will appreciate that a variety of other techniques can be used to apply friction to the spherical head of a polyaxial bone screw to allow the bone screw to be maintained in a desired angular orientation before locking the bone screw within the receiver member. By way of non-limiting example, the spherical head of the polyaxial screw can include a coating or surface treatment thereon to hinder movement of the screw head with respect to the receiver member. Alternatively, or in addition, the spherical head, the compression cap, and/or the receiver member can include one or more protrusions formed thereon to frictionally engage the spherical head to allow the orientation of the head to be maintained in a desired configuration. The protrusions can be, for example, formed from a plastic material that is effective to interfere with the free rotational movement of the screw within the receiver.